Office Action Summary	Application No.	Applicant(s)
	10/664,929	SMITH ET AL.
	Examiner	Art Unit
	FARHAN SYED	2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 12-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,12-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)	
1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	6) ☐ Other: _____.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,929	09/22/2003	Adam Smith	0026-0051	5130

44989 7590 09/19/2011

HARRITY & HARRITY, LLP
11350 Random Hills Road
SUITE 600
FAIRFAX, VA 22030

EXAMINER	
SYED, FARHAN M	

ART UNIT	PAPER NUMBER
2165	

MAIL DATE	DELIVERY MODE
09/19/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. Claims 1-8 and 12-33 are pending

Examiner's Remarks

2. The Board of Patent Appeals and Interference (BPAI) reversed the Examiner's rejection of claims 1-8 and 12-33. In light of the arguments provided, the Examiner has set forth new grounds of rejection of the pending claims.

Claim Objections

3. Claims 1-8 and 12-33 are objected to because of the following informalities: The Examiner suggests amending the claims to replace the limitation "A/The method" to "A/The computer-implemented method," indicating that the methods steps are tied to a particular machine.. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-14, 16-19, 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz et al (U.S. Pat. Pub. 2003/0061211 and known hereinafter as Shultz) in view of a non-patent literature titled "GeoMiner: A System Prototype for

Spatial Data Mining," by Han, Jiawei et al., ACM, Proceedings of the SIGMOD international conference '97, Volume 26, issue 2, June 1997, pages 553-556 (known hereinafter as Han).

As per claim 1, 27-30, 32, and 33, Shultz teaches a method comprising: receiving a search query that includes one or more keywords (i.e. *"The general information query may include one or more criterion about a particular entity or type of entity such as: a business name, category of business, a specific GIS location, a product name, a brand name, a service name, pricing criterion, a time criterion, an event criterion, a service category, or combinations thereof."* The preceding text clearly indicates that a search query is the general information query that includes one or more keywords, which are particular entity or type of entity such as: a business name, category of business, a specific GIS location, a product name, etc.)(Page 4, paragraph 48); obtaining one or more geographical identifiers (i.e. *"Geographic criteria may also include the geographic area within a specified zip code, an area code, or the area defined by a specific radius from the location data, such as a street address, zip code, area code, state, longitudinal and latitudinal coordinates, any unified geocoding system, state planar coordinates, or combinations thereof."* The preceding text clearly indicates that a geographical identifier is a geographic criteria, of which one or more may be combined together.)(Page 1, paragraph 12); identifying an area of interest based, at least in part, on the one or more geographical identifiers (i.e. *"... searching a geographic information database and an information system database for information corresponding to the geographically defined query..."* The preceding text clearly indicates that identifying an area of interested is the result of the information corresponding to the geographically defined query, and one or more geographical identifiers are contained within a geographically defined query.)(Page 1, paragraph 12), where a size of the area of interest (i.e. geographical location or area of interest)(page 4, paragraph [0047]) is dynamically set based (i.e.

"predefined index parameter")(page 4, paragraph 48), at least in part, on the one or more key words (i.e. *"The general information query may include one or more criterion about a particular entity or type of entity such as: a business name, category of business, a specific GIS location, a product name, a brand name, a service name, pricing criterion, a time criterion, an event criterion, a service category, or combinations thereof."* The preceding text clearly indicates that a search query is the general information query that includes one or more keywords, which are particular entity or type of entity such as: a business name, category of business, a specific GIS location, a product name, etc.)(Page 4, paragraph 48); identifying documents that are associated with addresses located within the area of interest (i.e. *"In yet another aspect of the present invention, the method may also include: identifying multiple search results corresponding to the specified geographic area, and sorting the search results utilizing at least one sorting criterion selected from the group comprising: distance from a selected geographic location, time, price, and alphabetical order, and wherein the query is at least one entity criterion chosen from the group comprising name, brand name, product type, product category, service name, service category, business name, event, event forum, price, time, and/or combinations thereof."* The preceding text clearly indicates that identifying documents are search results and address located within the area of interest is the specified geographic area.)(Page 2, paragraph 18); determining ones of the identified documents that match the one or more keywords as relevant documents (i.e. *"...receiving a query from an associated user, searching for at least one search result, identifying the at least one search result corresponding to a specified geographic area, and providing the at least one identified search result to the associated user."* The preceding text clearly indicates that one or more keywords are contained in a query that corresponds to a specified geographical area and identifying documents are at least one identified search result.)(Page 2, paragraph 17).

Shultz does not explicitly teach the method of grouping the relevant documents into clusters based, at least in part, on the addresses associated with the relevant

documents, each of a plurality of the clusters corresponding to one of the addresses; and presenting the clusters.

Han, see pages 553-555, section 2 and Figure 1, which discloses grouping the relevant documents into clusters based *(geo-clustering rules are applied to spatial data, where it is well known in the art that spatial data includes at least in part an address or location identifier associated with the data.)*, at least in part, on the addresses associated with the relevant documents, each of a plurality of the clusters corresponding to one of the addresses *(e.g. geo-comparator includes a geo-cluster analyzers that illustrates the differences in weather patterns between British Columbia and Alberta. The geo-comparator compares one set of data known as the target class to the other set(s) of data, known as contrasting (class(es).)*; and

presenting the clusters *(Figure 2 illustrates a graphical user interface that is used to display or present the GeoMiner system that includes geo-cluster results.)*.

Han is directed to spatial data mining based on classification and clustering rules. Shultz is directed to correlating search results in a user defined geographic criteria. Both are analogous art and therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to include the method of grouping the relevant documents into clusters based, at least in part, on the addresses located within the area of interest; and presenting the clusters with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 2, the modified teachings of Shultz and Han teaches the method wherein the one or more geographical identifiers are received as part of the search query (i.e. *"User query 202 may preferably include (i) location data, (ii) a general information query (e.g., subject matter desired), and/or (iii) geographic criteria."* The preceding text clearly indicates that a geographical identifier, which is a geographic criteria, is part of the search query, which is the user query.)(Page 4, paragraph 46).

As per claim 3, the modified teachings of Shultz and Han teaches the method wherein the one or more geographical identifiers are inferred independent of the search query (i.e. *"User query 202 may preferably include (i) location data, (ii) a general information query (e.g., subject matter desired), and/or (iii) geographic criteria."* The preceding text clearly indicates that a geographical identifier, which is a geographic criteria, is inferred independent of the search query, as it may or may not be part of the user query.)(Page 4, paragraph 46).

As per claim 4, the modified teachings of Shultz and Han teaches the method wherein the one or more keywords relate to a business or organization (i.e. *"The general information query may include one or more criterion about a particular entity or type of entity such as: a business name, category of business, a specific GIS location, a product name, a brand name, a service name, pricing criterion, a time criterion, an event criterion, a service category, or combinations thereof."* The preceding text clearly indicates that one or more keywords are one or more criterion.)(Page 4, paragraph 48).

As per claim 5, the modified teachings of Shultz and Han teaches the method wherein the one or more geographical identifiers include location-specific information

that approximately identifies a location of the business or organization (i.e. *"For example, user query 202 can be limited to those results (e.g. businesses) that are located in a defined geographic area. For example, the geographic area may be a city, county, state, country, radial distance, or geometric corridor."* The preceding text clearly indicates that a city, county, state, country, radial distance, or geometric corridor is an example of location specific information that approximately identifies a location.)(Page 4, paragraph 49).

As per claim 6, the modified teachings of Shultz and Han teaches the method wherein the one or more geographical identifiers include at least one of a partial address, a partial telephone number, an entire address, and an entire telephone number (i.e. *"Geographic criteria may also include the geographic area within a specified zip code, an area code, or the area defined by a specific radius from the location data, such as a street address, zip code, area code, state, longitudinal and latitudinal coordinates, any unified geocoding system, state planar coordinates, or combinations thereof."* The preceding text clearly indicates that a geographical identifier is a geographical criteria that include a partial address, a partial telephone number, an entire address, an entire telephone number, zip code, area code, etc.)(Page 4, paragraph 49).

As per claim 7, the modified teachings of Shultz and Han teaches the method wherein the identifying an area of interest includes: determining a geographic location based, at least in part, on the one or more geographical identifiers, determining a geographic center of the geographic location, and identifying locations within a certain distance of the geographic center as the area of interest (i.e. *"For example, if the user query (step 202) included steak houses near a desired map location, and one or more matching records of the search result did not fall within the currently displayed user map region, the area of displayed map may*

be updated (automatically or upon user selection) to accommodate the returned result within the displayed map region (step 242)." The preceding text clearly illustrates that returning a query result for a steak house near a desired map locations indicates that a geographical location is determined, where the geographical identifier is the geographical location; the map location is the geographical center of the geographical location, as one or more of the matching records is determined if the record falls within the map region, and identifying location is displaying one or more matching records.)(Page 5, paragraph 62).

As per claim 8, the modified teachings of Shultz and Han teaches the method wherein the identifying locations includes: determining a radius, and identifying the area of interest as a circle centered on the geographic center with the determined radius (i.e. "*Geographic criteria may also include the geographic area within a specified zip code, an area code, or the area defined by a specific radius from the location data, such as a street address, zip code, area code, state, longitudinal and latitudinal coordinates, any unified geocoding system, state planar coordinates, or combinations thereof. In addition, the search results can be limited and/or sorted to those results that are in closest proximity to the location data. For example, if the user enters or spatially designates his home street address as the location data, then he can request that the ten search results in closest proximity to his home be provided.*" The preceding text clearly indicates that determining a radius is an area defined by a specific radius from the location data, which is also the area of interest.)(Page 4, paragraph 49).

As per claim 12, Shultz does not explicitly teach the method wherein the identifying documents includes: accessing a database that associates documents from a repository of crawled documents to addresses associated with the documents.

Han, see page 554, discloses wherein the identifying documents includes: accessing a database that associates documents from a repository of crawled

documents to addresses associated with the documents *(GeoMiner accesses spatial databases that contain geographic information data that may then be associated with user specified search results.)*.

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to include the method wherein the identifying documents includes: accessing a database that associates documents from a repository of crawled documents to addresses associated with the documents with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 13, the modified teachings of Shultz and Han teaches the method further comprising: scoring the relevant documents based on at least one of a distance factor and a relevancy factor (i.e. "Any of these types of matching information may subsequently be sorted according to user preference and/or a predefined search result sorting routine. Such sorting may pertain to specific sorting criteria, for example, by order of importance, relevance or hierarchy of the information retrieved from database 133. Example sorting criterion might include, a distance from the user identified location (e.g., step 232), corresponding advertising information (e.g., step 234) and/or business information (e.g., step 236). Business information may be sorted according to various criteria, for example, alphabetical criteria, such as by the name of the business, size criteria, such as the size of the business, price criteria, time criteria, event criteria, or any other sorting criteria that might be helpful to a user."(Page 5, paragraph 60).

As per claim 14, the modified teachings of Shultz and Han teaches the method wherein the distance factor for one of the relevant documents refers to a distance that

an address associated with the one of the relevant documents is from a geographic center of the area of interest (i.e. *"Any of these types of matching information may subsequently be sorted according to user preference and/or a predefined search result sorting routine. Such sorting may pertain to specific sorting criteria, for example, by order of importance, relevance or hierarchy of the information retrieved from database 133. Example sorting criterion might include, a distance from the user identified location (e.g., step 232), corresponding advertising information (e.g., step 234) and/or business information (e.g., step 236). Business information may be sorted according to various criteria, for example, alphabetical criteria, such as by the name of the business, size criteria, such as the size of the business, price criteria, time criteria, event criteria, or any other sorting criteria that might be helpful to a user."* The preceding text clearly indicates a distance that an address associated with one of the relevant documents is from the geographical area of interest is the distance from the user-identified location.)(Page 5, paragraph 60).

As per claim 16, Shultz does not explicitly teach the method wherein the grouping the relevant documents into clusters include: forming a separate one of the clusters for each of the addresses located within the area of interest.

Han, see pages 553-554, discloses the method wherein the grouping the relevant documents into clusters includes: forming a separate one of the clusters for each of the addresses located within the area of interest *(i.e. geo-cluster analyzers allows clustering of relevant search results by geographical interests. For example, Han discloses the differences in weather patterns between British Columbia and Alberta, Canada.)*.

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to

include the method wherein the grouping the relevant documents into clusters includes: forming a separate one of the clusters for each of the addresses located within the area of interest with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 17, Shultz does not explicitly teach the method wherein the grouping the relevant documents into clusters includes: identifying a first one of the addresses associated with a first one of the relevant documents, determining one or more second ones of the relevant documents that are also associated with the first address, and grouping the first relevant document and the one or more second relevant documents into a cluster.

Han, see page 555, teaches the method wherein the grouping the relevant documents into clusters includes: identifying a first one of the addresses associated with a first one of the relevant documents, determining one or more second ones of the relevant documents that are also associated with the first address, and grouping the first relevant document and the one or more second relevant documents into a cluster *(i.e. Example 2.2 illustrates identifying a first one of the addresses associated with the first one of the relevant documents from precipitation. The one or more second ones of the relevant documents are associated with temperature and the grouping the relevant documents in a cluster called weather probe.).*

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to

include the method wherein the grouping the relevant documents into clusters includes: identifying a first one of the addresses associated with a first one of the relevant documents, determining one or more second ones of the relevant documents that are also associated with the first address, and grouping the first relevant document and the one or more second relevant documents into a cluster with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 18, Schultz does not explicitly teach the method wherein the grouping the relevant documents into clusters include: placing each of the relevant documents into at least one cluster.

Han, see page 555, teaches the method wherein the grouping the relevant documents into clusters includes: placing each of the relevant documents into at least one cluster *(i.e. geo-cluster analyzers allows clustering of relevant search results by geographical interests. For example, Han discloses the differences in weather patterns between British Columbia and Alberta, Canada.)*.

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to include the method wherein the grouping the relevant documents into clusters includes: placing each of the relevant documents into at least one cluster with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 19, Schultz does not explicitly teach the method wherein the grouping the relevant documents into clusters include: placing at least one of the relevant documents into a plurality of the clusters.

Han, see pages 554-555, teaches the method wherein the grouping the relevant documents into clusters includes: placing at least one of the relevant documents into a plurality of the clusters *(i.e. geo-cluster analyzers allows clustering of relevant search results by geographical interests. For example, Han discloses the differences in weather patterns between British Columbia and Alberta, Canada, where data associated with British Columbia is one cluster and data associated with Alberta is another cluster..).*

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to include the method wherein the grouping the relevant documents into clusters includes: placing at least one of the relevant documents into a plurality of the clusters with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 25, Shultz does not explicitly teach the method wherein the presenting the clusters includes: forming a result output for each of the clusters, the result output including at least one of a title and a snippet for one of the relevant documents in the cluster and a title for another one or more of the relevant documents in the cluster.

Han, see pages 554-555, teaches the method wherein the presenting the clusters includes: forming a result output for each of the clusters, the result output including at least one of a title and a snippet for one of the relevant documents in the cluster and a title for another one or more of the relevant documents in the cluster *(i.e. geo-cluster analyzers allows clustering of relevant search results by geographical interests. For example, Han discloses the differences in weather patterns between British Columbia and Alberta, Canada.)*.

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to the method wherein the presenting the clusters includes: forming a result output for each of the clusters, the result output including at least one of a title and a snippet for one of the relevant documents in the cluster and a title for another one or more of the relevant documents in the cluster with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 26, Shultz does not explicitly teach the method wherein the presenting the clusters includes: forming a result output for each of the clusters, the result output including a name of a business or organization and a title for one or more of the relevant documents in the cluster.

Han, see pages 554-555, teaches the method wherein the presenting the clusters includes: forming a result output for each of the clusters, the result output including a name of a business or organization and a title for one or more of the relevant

documents in the cluster *(i.e. geo-cluster analyzers allows clustering of relevant search results by geographical interests. For example, Han discloses the differences in weather patterns between British Columbia and Alberta, Canada.).*

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to the method wherein the presenting the clusters includes: forming a result output for each of the clusters, the result output including a name of a business or organization and a title for one or more of the relevant documents in the cluster with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 31, the modified teachings of Shultz and Han teaches the method wherein the at least one portion of the telephone number includes at least one of an area code and a prefix associated with the telephone number *(i.e. "In yet another aspect of the present invention, the method may also include: identifying multiple search results corresponding to the specified geographic area, and sorting the search results utilizing at least one sorting criterion selected from the group comprising: distance from a selected geographic location, time, price, and alphabetical order, and wherein the query is at least one entity criterion chosen from the group comprising name, brand name, product type, product category, service name, service category, business name, event, event forum, price, time, and/or combinations thereof. In certain embodiments of the invention, the specified geographic area is selected from the group comprising distance from a zip code, distance from an area code, distance from a telephone exchange area, distance from a state, distance from longitudinal and latitudinal coordinates, distance from state planar coordinates, a geometric corridor, distance from a unified geocoding system coordinate, and/or combinations thereof."* The preceding text clearly indicates that at least a portion of the telephone number includes one of an area code is the area code, which is a

prefix of the telephone exchange area. That is, a part of the telephone number may be used as part of the geographical identifier.)(page 2, paragraph 18).

6. Claims 15, 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz et al (U.S. Pat. Pub. 2003/0061211 and known hereinafter as Shultz). in view of non-patent literature titled "GeoMiner: A System Prototype for Spatial Data Mining," by Han, Jiawei et al., ACM, Proceedings of the SIGMOD international conference '97, Volume 26, issue 2, June 1997, pages 553-556 (known hereinafter as Han) and in further view of Rubenczyk et al (U.S. Patent Pub. No. 2003/0217052 and known hereinafter as Rubenczyk).

As per claim 15 and 23, Shultz and Han do not explicitly teach the method wherein the relevancy factor for one of the relevant documents refers to at least one of a number of the one or more keywords present in the one of the relevant documents and how prominently the one or more keywords appear in the one of the relevant documents.

Rubenczyk teaches the method wherein the relevancy factor for one of the relevant documents refers to at least one of a number of the one or more keywords present in the one of the relevant documents and how prominently the one or more keywords appear in the one of the relevant documents (i.e. *"A ranker 30 provides a numerical value to describe the overall level of match between the query and each data item, i.e. it assesses the relevance of data-items to the query."* The preceding text clearly indicates that at least one of a number of one or more keywords present in one of the relevant documents and how prominently the one or more

keywords appear is the overall level of match between the query and each data item.)(page 13, paragraph 420).

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han and further modify the teachings of Shultz and Han with the teachings of Rubenczyk to include the method wherein the relevancy factor for one of the relevant documents refers to at least one of a number of the one or more keywords present in the one of the relevant documents and how prominently the one or more keywords appear in the one of the relevant documents with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 20, Shultz and Han do not explicitly teach the method wherein the presenting the clusters includes: generating scores for the relevant documents within each of the clusters, and sorting the relevant documents within each of the clusters based, at least in part, on the scores.

Rubenczyk teaches the method wherein the presenting the clusters includes: generating scores for the relevant documents within each of the clusters (i.e. *"A ranker 30 provides a numerical value to describe the overall level of match between the query and each data item, i.e. it assesses the relevance of data-items to the query."* The preceding text clearly indicates that generating scores is the numerical value to each data item and relevant documents is the relevance of the data-items.)(page 13, paragraph 420), and sorting the relevant documents within each of the clusters based, at least in part, on the scores (i.e. *"The retrieved items can be presented either as an unorganized set or as an ordered list, sorted by some meta-data criterion such as date,*

author or price, or, more to the point, by the item's rank score (from best to poorest) that allegedly measures its closeness to the user request." The preceding text clearly indicates that scores is a meta-data criterion that can sort the relevant documents within each of the clusters and the clusters are the retrieved items.)(page 2, paragraph 30).

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han and further modify the teachings of Shultz and Han with the teachings of Rubenczyk to include the method wherein the presenting the clusters includes: generating scores for the relevant documents within each of the clusters, and sorting the relevant documents within each of the clusters based, at least in part, on the scores with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 21, Shultz and Han do not explicitly teach the method wherein the presenting the clusters includes: ranking the clusters based on at least one of a distance factor and a relevancy factor, and sorting the clusters based, at least in part, on the ranking.

Rubenczyk teaches the method wherein the presenting the clusters includes: ranking the clusters based on at least one of a distance factor and a relevancy factor (i.e. *"A ranker 30 provides a numerical value to describe the overall level of match between the query and each data item, i.e. it assesses the relevance of data-items to the query."* The preceding text clearly indicates that distance and relevance factors are a type of ranker that provides a numerical value to the data-items, which are the clusters.)(page 13, paragraph 420), and sorting the clusters based, at least in part, on the ranking (i.e. *"The retrieved items can be presented either as an unorganized set or as an ordered list, sorted by some meta-data criterion such as date, author or price, or, more to the*

point, by the item's rank score (from best to poorest) that allegedly measures its closeness to the user request." The preceding text clearly indicates that ranking is a meta-data criterion that can sort the relevant documents within each of the clusters and the clusters are the retrieved items.)(page 2, paragraph 30).

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han and further modify the teachings of Shultz and Han with the teachings of Rubenczyk to include the method wherein the presenting the clusters includes: ranking the clusters based on at least one of a distance factor and a relevancy factor, and sorting the clusters based, at least in part, on the ranking with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 22, Shultz does not explicitly teach the method wherein the distance factor is distance that an address is from a geographical center of the area of interest.

Han teaches the method wherein the distance factor for one of the clusters refers to a distance that an address associated with the one cluster is from a geographic center of the area of interest *(i.e. "The retrieved documents are divided into subsets of similar documents, where each subset of the subsets of similar documents is described in terms of a subset pattern."* The preceding text clearly indicates that the distance factor is an instance of a subset pattern, in which that type of a subset pattern is contained in the cluster.)(page 3, paragraph 33).

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han to include the method wherein the distance factor for one of the clusters refers to a

distance that an address associated with the one cluster is from a geographic center of the area of interest with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

As per claim 24, Shultz and Han on a specificity of the one or more geographical identifier (i.e. *"Geographic criteria may also include the geographic area within a specified zip code, an area code, or the area defined by a specific radius from the location data, such as a street address, zip code, area code, state, longitudinal and latitudinal coordinates, any unified geocoding system, state planar coordinates, or combinations thereof."* The preceding text clearly indicates that a geographical identifier is a geographic criteria, of which one or more may be combined together.)(Page 1, paragraph 12).

Shultz and Han do not explicitly teach the method wherein the presenting the clusters further includes: weighting the distance factor or the relevancy factor differently based.

Rubenczyk teaches the method wherein the presenting the clusters further includes: weighting the distance factor or the relevancy factor differently based (i.e. *"Each node in a hierarchy represents a potential class, it may have query terms associated with it and may be linked to a set of domain data items which may be ranked using weighting values."* The preceding text clearly indicates that the distance and relevancy factors are a type of weighting values based on the search query, which is the query.)(page 14, paragraph 427).

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Shultz with the teachings of Han and further modify the teachings of Shultz and Han with the teachings of Rubenczyk to include the method wherein the presenting the clusters further includes: weighting the

distance factor or the relevancy factor differently based, at least in part, on a specificity of the one or more geographical identifiers with the motivation to search by a specific, user-defined geographical area. (Shultz, page 1, paragraph 8).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892 that includes additional prior art of record describing the general state of the art in which the invention is directed to.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhan M. Syed whose telephone number is 571-272-7191. The examiner can normally be reached on 8:30AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Farhan M Syed/
Examiner, Art Unit 2165

August 22, 2011

/Neveen Abel-Jalil/

Supervisory Patent Examiner, Art Unit 2165

/JACK HARVEY/

Director, Technology Center 2100